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Examiner Name: Rahhl, Jerry T Art Unit: 2874
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1. Response to Item 3 and 4 rejection of claims for being anticipated by US patent 5,856,881 of Otsuka et. al.

Nowhere does US Patent 5,856,881 disclose a fiber or method for reducing nonlinear effects that relies on a dopant uniformly dispersed throughout the core. In fact, quite the opposite, Otsuka's fiber and method rely on varying the doping longitudinaly along the length of the core. Specifically Column 6 line 35-37 states, "in forming the preform 12 shown in fig.4, the concentration of the dopant added to the core portion 4 or the clad portion 10 is changed as shown in fig. 5." In referring to figure 5 of US Patent 5,856,881 the examiner will note that the dopant concentration is NOT uniform, but instead varies with time/length. Again in claim 2 Otsuka claims, " An optical fiber transmission line comprising: a single mode optical fiber in which a zero dispersion wavelength is varied in a longitudinal direction...". Again it is clear that Otsuka is not using a uniform property change but, quite the opposite, is using varying the dopant in a longitudinal direction. Please note that the present application uses the language "uniformly dispersed throughout the core" in the claims. The present invention is simpler than Otsuka because the doping concentration of the preform does not have to be varied with length/time. This results in a simpler manufacturing process that is not described or anticipated by Otsuaka. Furthermore, Otsuka does not state that no two wavelengths travel at the same velocity. In view of these arguments we submit that the present application is not anticipated by Otsuka et. al.

2. Response to item 5 through item 8 rejection of claims for being unpatentable over Otsuka et. al.

In light of the above discussion. It is obvious that the present invention was not obvious to Otsuka, because the present invention is much easier to manufacture because it does not require longitudinal variation in doping, but rather employs a uniform doping. The invention does not rely so much on the dopant materials chosen as the concentration of the dopant chosen. The uniform dopant concentration being chosen to ensure no two

wavelengths have the same group velocity. In view of these arguments we submit that the present invention is patentable over Otsuka.

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